

#### DEPARTMENT OF THE NAVY

BUREAU OF MEDICINE AND SURGERY WASHINGTON 0 C 20372 5120

IN REPLY REFER TO

BUMEDINST 1510.17 BUMED-53 15 Mar 91

# **BUMED INSTRUCTION 1510.17**

From: Chief, Bureau of Medicine and Surgery

To: Ships and Stations Having Medical Department Personnel

Subj: SEARCH AND RESCUE (SAR) MEDICAL TECHNICIAN (HM-8401)

TRAINING REQUIREMENTS

Ref: (a) OPNAVINST 3710.7M (NOTAL)

(b) NWP 19-1, Navy Search and Rescue Manual (NOTAL)

(c) Naval Air Training and Operating Procedures
Standardization (NATOPS) Manual for applicable
aircraft

(d) OPNAVINST 3130.6 (NOTAL)

(e) NAVMILPERSCOMINST 1326.1A

(f) MILPERSMAN 1410240

(g) NAVEDTRA 10500

(h) MANMED article 15-65(6)

(i) SECNAVINST 5214.2B

Encl: (1) Search and Rescue Medical Technician Training Requirements

(2) Navy Enlisted Classification (NEC) Data Sheet

(3) Inflight Medical Technician Job Qualification Requirements

(4) Other Publications as References

1. <u>Purpose</u>. To issue standard training requirements to ensure the quality and consistent training for Search and Rescue (SAR) Medical Technicians (HM-8401).

2. Cancellation. NAVMEDCOMINST 1510.5A.

3. <u>Background</u>. Activities around the world are tasked to provide medical personnel capable of providing life support functions during search and rescue missions. The value of hospital corpsmen (HM), as crewmembers, to provide basic life support care and stabilize injured personnel, has repeatedly been demonstrated. Because these HMs are the sole agents of primary medical care during SAR missions, only highly motivated HMs are selected for training. This instruction outlines standard requirements for training HMs to receive the Navy Enlisted Classification (NEC) code HM-8401.



## 4. Policy

- a. Enclosures (1) and (2) identify course content and NEC data to be used in conjunction with aircrew training requirements outlined in references (a) through (c). Enclosure (3) outlines minimum training requirements.
- b. Personnel completing training outlined in enclosure (3) must request approval by Naval Military Personnel Command (N-48) for NEC HM-8401. Submission of NAVPERS 1221/1 recommending NEC HM-8401 will be accompanied by National Registry Certification of successful completion of Emergency Medical Technician-Ambulance (EMT-A) training and Naval Air Training and Operating Procedures Standardization (NATOPS) Evaluation Report (OPNAV 3510/8). After obtaining approval for the NEC change, request for designation as a naval aircrewman will be submitted per references (d) through (h).
- c. All candidates must complete Naval Aircrew Candidate School course Q-050-1500 per reference (g).
- d. Hospital corpsmen in a training status will not assume the duties of a SAR corpsman until NATOPS qualified per reference (a) and completion of enclosure (3).
- e. Hospital corpsmen must meet physical qualifications listed in reference (h).

## 5. Action

- a. Commanding officers and officers in charge of activities providing SAR corpsmen must:
- (1) Use enclosures (1) through (4) as a minimum guideline to draft a local training syllabus.
- (2) Submit outlines for intravenous (IV) therapy and medical considerations during flight to the Commanding Officer, Naval Health Sciences Education and Training Command (HSETC) via Commanding Officer, Helicopter Combat Support Squadron Sixteen (HC-16), SAR Model Manager, for approval until standard courses are developed and implemented.
- b. SAR Model Manager will coordinate annual evaluations of all commands with valid HM-8401 billets and report findings to the aviation type commanders (COMNAVAIRLANT/COMNAVAIRPAC) and BUMED (MED-53).
- 6. Forms. NAVPERS 1221/1 (Rev. 2-86), Navy Enlisted Classification Code Change Recommendation, S/N 0106-LF-012-2106; OPNAV 3760/32 (Rev. 4-81), Naval Flight Training Qualification

Jacket, S/N 0107-LF-736-2112; OPNAV 3510/8 (Rev. 7-78), NATOP Evaluation Report, S/N 0107-LF-035-1040; and OPNAV 3710/4 (Rev. 2-84), Naval Flight Record, S/N 0107-LF-037-1020 are available from the Naval Supply System and may be requisitioned per NPFC P-2002 D.

7. Report Exemption. The requirements contained in paragraph 5 are exempt from reports control per reference (i), part IV, paragraph G8.

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# SEARCH AND RESCUE MEDICAL TECHNICIAN TRAINING REQUIREMENTS

## Course Data Sheet

- 1. Course Title. Search and Rescue Medical Technician.
- 2. <u>Prerequisite Training</u>. Successfully completed Naval Aircrew Candidate School (CANTRAC Q-050-1500) and a course of instruction for EMT-A.
- 3. <u>Course Length</u>. Must attain local certification in intravenous therapy, become a nationally registered EMT-A and a NATOPS qualified aircrewman no later than 18 months from the start of training.
- 4. Training Site. All commands supporting flight and SAR missions.
- 5. <u>Class Capacity</u>. Unspecified.
- 6. <u>Instructor Requirements</u>
- a. <u>Medical Phase</u>. Must be a qualified EMT-A instructor (may be a physician, nurse, HM-8425, or designated EMT instructor as appropriate).
- b. <u>Flight Phase</u>. Must be a NATOPS qualified instructor for the aircrew position.
- 7. <u>Instruction Program Manager</u>. Instruction Systems Department, HSETC.
- 8. Quota Control. Command control.
- 9. <u>Primary Mode of Instruction</u>. Individually paced, per paragraph 3 of this enclosure.
- 10. Implementation Date. When directed.

## NAVY ENLISTED CLASSIFICATION (NEC) DATA SHEET

- 1. HM-8401 Search and Rescue Medical Technician. Performs those aircrew and emergency medical care functions assigned in support of search and rescue missions. Is qualified in EMT-A, cardio-pulmonary resuscitation (CPR), Triage, IV therapy, use of emergency medical equipment, patient handling, and aeromedical evacuation techniques. Must be NATOPS qualified for assigned aircrew position.
- 2. <u>Personnel Eligible</u>. Selected volunteer HMs in paygrades E3-E7. (HM-0000 or HM-8404).
- 3. Obligated Service. None.
- 4. Physical Requirements. As set forth in reference (h).
- 5. Earned NEC. HM-8401.
- 6. Follow-on Training. Annual basic life support, biennial EMT-A, and IV recertification must be completed and documented in the member's service record. Aircrew training is documented in the NATOPS Flight Personnel Training Qualification Jacket (OPNAV 3760/32). Initial and annual NATOPS qualifications and flight time summaries will be documented in the administrative remarks section of the member's service record per reference (f).

# INFLIGHT MEDICAL TECHNICIAN JOB QUALIFICATION REQUIREMENTS

## FAM 1 - (NO FLY)

- I. COMMAND MISSION
  - A. AREA SAR
  - B. SHIP SUPPORT (IF APPLICABLE)
  - C. PILOT AND AIRCREW TRAINING
  - D. WATCHBILL AND FLIGHT SCHEDULE
  - E. OPNAV 3710/4, FLIGHT RECORD
- II. PERSONNEL FLIGHT EQUIPMENT
  - A. PROPER WEARING
  - B. LOCATION OF ITEMS
- III. FLIGHT LINE SAFETY
  - A. EAR AND EYE PROTECTION
  - B. FOD PREVENTION
  - C. FIRE EXTINGUISHER USE
  - D. A/C FUELING PROCEDURES
  - E. ENGINE FIRE ON START OR SHUTDOWN
  - F. ENTERING OR EXITING ROTOR ARC

# FAM 2 - (NO FLY)

- I. EMERGENCY EGRESS
  - A. LOCATION AND OPERATION OF EMERGENCY EXITS
  - B. A/C SEAT BELTS AND GUNNER BELTS
  - C. LOCATION/CONFIGURATION
  - D. CONTROLLED DITCHING PROCEDURES AND OVERLAND FLIGHT RECORD
  - E. UNCONTROLLED DITCHING PROCEDURES
    - (1) OVERLAND
    - (2) OVERWATER
  - F. BLINDFOLDED EGRESS DRILL
  - G. BLIND CABIN CHECK
    - (1) FIRE BOTTLES
    - (2) FIRST AID KITS
    - (3) DOOR JETTISON HANDLE
    - (4) WINDOW JETTISON HANDLE
    - (5) LIFE RAFT
    - (6) SAR EQUIPMENT
  - H. ICS PROCEDURES

# FAM 3 - (NO FLY)

- I. AIRCRAFT CONFIGURATION AND SAR EQUIPMENT
  - A. EQUIPMENT CARRIED ON SAR AIRCRAFT
    - (1) SMOKE MARKERS
      - (a) SAFETY
      - (b) ARMING
      - (c) LAUNCHING
    - (2) RESCUE DEVICES
      - (a) RESCUE STROP
      - (b) FOREST PENETRATOR
      - (c) MEDEVAC LITTER
    - (3) SAR CURTAIN
      - (a) DISCUSS CONTENTS
      - (b) PROPER STOWAGE
    - (4) FIRST AID KITS
      - (a) LEVEL A
      - (b) LEVEL B
    - (5) MEDEVAC EQUIPMENT CAPABILITIES AND POWER REQUIREMENTS
    - (6) WEIGHT AND BALANCE
  - B. SAR LOCKER
    - (1) INVENTORY
    - (2) INSPECTION

## FAM 4 - (NO FLY)

#### MANEUVERS

- I. INTRODUCE TREE EXTRACTIONS\*
  - A. REQUIRED KNOTS
  - B. USE OF SKY GENIE
  - C. USE OF FIGURE EIGHT DEVICE
  - D. ROPE INSPECTIONS
  - E. USE OF CARABINIERS
  - F. USE OF CLIMBER SPIKES
  - G. USE OF SAFETY BELT
- II. OVERLAND SEARCH
  - A. COMPASS ORIENTEERING
  - B. COMPASS GRID SEARCHES
  - C. VOICE AND RADIO COMMUNICATIONS
  - D. GROUND SIGNALLING DEVICES

(DISCUSS)

- E. WILDLIFE ENCOUNTERS
- F. REMOTE AREA RECOVERY OF REMAINS

(LOCAL POLICY)

- G. CRASH SITE PRESERVATION
- H. LAND SURVIVAL TECHNIQUES
- \* IF REQUIRED BY COMMAND MISSION

#### IFMT (1) FLIGHT PHASE

#### INTRODUCE

- I. HOIST PREFLIGHT
- II. SURVIVOR HOOK-UP
  - A. RESCUE STROP
  - B. STOKES LITTER
  - C. MEDEVAC LITTER
- III. OVERLAND HOISTING
- IV. OVERWATER HOISTING
- V. NORMAL HOIST OPERATIONS
- VI. MANUAL OVERRIDE HOIST OPERATION\*
- VII. HOIST EMERGENCIES. CIRCUIT BREAKERS, SWITCHES, AND CANNON PLUGS
- VIII. INTERNAL CARGO WINCH\*
  - A. USAGE
  - B. LIMITATIONS
  - C. PROCEDURES
- IX. ICS PROCEDURES (DISCUSS)
- X. HOIST LIMITATIONS. NORMAL AND MANUAL
- XI. HOIST INSTALLATION
- XII. SURVIVOR HOOK-UP. FOREST PENETRATOR
- XIII. EMERGENCY PROCEDURES
  - A. GROUND
    - (1) FUEL SPILL
    - (2) FIRE
    - (3) DYNAMIC ROLLOVER
- \* FOR APPLICABLE AIRCRAFT

# IFMT (1) FLIGHT PHASE (CONTINUED)

- B. INFLIGHT
  - (1) FIRES
  - (2) HYDRAULIC LEAKS
  - (3) DITCHING
  - (4) ICS FAILURE

# IFMT (2) FLIGHT PHASE

- I. SEARCH PROCEDURES (INTRO)
- II. CONFINED AREA LANDING (INTRO)\*
  - A. LIMITATIONS
  - B. CREW RESPONSIBILITIES
  - C. VOICE PROCEDURES
- III. SLOPE LANDINGS (INTRO) \*
  - A. LIMITATIONS
  - B. CREW RESPONSIBILITIES
  - C. VOICE PROCEDURES
- IV. SINGLE POINT LANDINGS (INTRO)\*
  - A. LIMITATIONS
  - B. CREW RESPONSIBILITIES
  - C. VOICE PROCEDURES
- V. ONE SKID PICK-UPS (INTRO) \*
  - A. LIMITATIONS
  - B. CREW RESPONSIBILITIES
  - C. VOICE PROCEDURES
- VI. CONFINED AREA HOISTING (INTRO)
- VII. LITTER AND TRAIL LINE PROCEDURES. EMERGENCY PROCEDURES
  - A. ICS FAILURE
  - B. FAILED OR JAMMED HOIST
- \* IF APPLICABLE BY COMMAND MISSION

# IFMT (3) FLIGHT PHASE

#### **MANEUVERS**

- I. FLARE HANDLING PROCEDURES (INTRO)
  - A. STORAGE
  - B. ARMING
  - C. DEPLOYMENT
- II. OVERWATER APPROACHES (INTRO)
  - A. MANUAL TALKOVER
  - B. AUTOMATIC APPROACHES\*
  - C. WINDLINE SAR PATTERN
- III. HOVER TRIM (REMOTE CONTROL) .\* LIMITATIONS
  - A. LOST ICS
  - B. FIRE INFLIGHT
  - C. LOSS OF ENGINE IN HOVER
  - D. HYDRAULIC FAILURE
  - E. ELECTRICAL FAILURE

\* FOR APPLICABLE AIRCRAFT

# IFMT (4) FLIGHT PHASE

- I. LOOKOUT PROCEDURES
- II. USE OF ALDIS LAMP
- III. FLARE DEPLOYMENTS
- IV. HOIST TO FLARE MARKER
- V. RAFT DEPLOYMENT
- VI. SCANNING TECHNIQUES
- VII. DISCUSS
  - A. SEARCH PATTERNS
  - B. VISUAL PROBLEMS AT NIGHT
    - (1) BLIND SPOT
    - (2) AUTOKINESIS
    - (3) FATIGUE
    - (4) VERTIGO
  - C. RESCUE SWIMMER HAND SIGNALS

# IFMT (5) FLIGHT PHASE

## PERFORM

- I. CONFINED AREA LANDINGS\*
- II. CONFINED AREA HOISTING
- III. SLOPE LANDINGS\*
- IV. SINGLE POINT LANDINGS\*
- V. ONE SKID PICK-UPS\*
- VI. EMERGENCY PICK-UPS
  - A. LOSS OF ENGINE IN HOVER
  - B. FIRE INFLIGHT
  - C. ELECTRICAL FIRE
  - D. HYDRAULIC FAILURE
  - E. FAILED OR JAMMED HOIST
  - F. ICS FAILURE
- VII. DISCUSS. SURVIVOR EVALUATION
  - A. BRIEF TO CREW
  - B. SURVIVOR ASSESSMENTS
  - C. TREATMENT ENROUTE
- \* IF APPLICABLE TO MISSION

# IFMT (6) FLIGHT PHASE

- I. FLARE DEPLOYMENTS
- II. OVERWATER MANUAL TALKOVERS
- III. OVERWATER AUTOMATIC TALKOVERS\*
- IV. HOVER TRIM (REMOTE CONTROL).\* VOICE PROCEDURES
- V. RAFT DEPLOYMENT
- VI. SURVIVOR HOISTING AT NIGHT
- VII. DISCUSS
  - A. EMERGENCY PROCEDURES
  - B. FAILED OR FAMMED HOIST
  - C. DITCHING AT NIGHT
  - D. VERTIGO
- \* FOR APPLICABLE AIRCRAFT

# NATOPS REVIEW N(1)

#### **MANEUVERS**

- I. BRIEF
- II. PREFLIGHT
- III. START-UP PROCEDURES
  - A. FIRE GUARD
  - B. SECURITY CHECK
  - C. ROTOR ENGAGEMENT
- IV. INFLIGHT PROCEDURES
- V. SEARCH PROCEDURES
- VI. CONFINED AREA PROBLEMS
  - A. CONFINED AREA LANDING\*
  - B. SLOPE LANDING\*
  - C. SINGLE POINT LANDING\*
  - D. ONE SKID PICK-UP\*

## VII. HOISTING

- A. OVERLAND
  - (1) LITTER OR TRAIL LINE PROCEDURES
  - (2) CONFINED AREA HOISTING
- B. OVER WATER

#### VIII. AIRCRAFT EMERGENCIES

- A. FIRE INFLIGHT
- B. SMOKE AND FUME ELIMINATION
- C. ELECTRICAL FAILURE
- \* FOR APPLICABLE AIRCRAFT

NATOPS REVIEW N(1) (CONTINUED)

# **MANEUVERS**

IX. SHUTDOWN

X. POST FLIGHT

XI. DEBRIEF

# NATOPS REVIEW N(2)

#### **MANEUVERS**

- I. BRIEF
- II. PREFLIGHT
- III. START-UP PROCEDURES
- IV. INFLIGHT PROCEDURES
- V. SEARCH PROCEDURES
- VI. HOISTING
  - A. OVERLAND
  - B. OVERWATER
  - C. FAILED OR JAMMED HOIST
  - D. RUNAWAY HOIST

#### VII. UNPREPARED AREAS

- A. CONFINED AREA LANDINGS\*
- B. SLOPE LANDINGS\*
- C. SINGLE POINT LANDINGS\*
- D. ONE SKID PICK-UPS\*

#### VIII. EMERGENCY EGRESS

- A. OVERLAND
- B. OVERWATER

## IX. EMERGENCY PROCEDURES

- A. FIRE OR SMOKE AND FUMES
- B. ELECTRICAL FAILURES
- C. HYDRAULIC FAILURES
- D. DITCHING
- \* FOR APPLICABLE AIRCRAFT

NATOPS REVIEW N(2) (CONTINUED)

# **MANEUVERS**

X. SHUTDOWN PROCEDURES

XI. POST FLIGHT

XII. DEBRIEF

## OTHER PUBLICATIONS AS REFERENCES

- 1. Standard First Aid Training Course and Instructor Syllabus. NAVEDTRA 10081-C, Naval Education and Training Command, Stock Numbers 0505-LP-050-4070 and 0502-LP-050-4075.
- 2. <u>Emergency Medical Treatment</u>. U.S. Air Force Aerospace Rescue and Recovery Service (ARRS) Regulation 160-34, U.S. Air Force Aerospace Rescue and Recovery Service, ARRS/SG, Scott AFB, IL 62225-5009.
- 3. <u>Situational Medical Problems</u>. U.S. Air Force ARRS Publication 160-35, U.S. Air Force ARRS, ARRS/SG, Scott AFB, IL 62225-5009.
- 4. Emergency Care, Fourth Edition. Grant, Murray, Bergeron, published by Brady, GSA contract GS-01F-09868.
- 5. <u>U.S. Navy Diving Manual</u>. NAVSHIPS 0994-001-9010 Chapter 8, Stock Number 0846-00072.
- 6. <u>Divers Alert Network Handbook</u>. Divers Alert Network, Box 3823-NDAN/-215, Duke University Medical Center, Durham, NC 27710.
- 7. <u>U.S. Naval Flight Surgeons Manual</u>. (Chapter 17) Contract N00014-76-C-1010.